

REMARKS

The amendments submitted herewith are responsive to the examiner's letter of November 3, 2004 and to the telephone interview with the examiner conducted on January 25, 2005.

Also, a review of the specification as filed reveals an informality; namely, a superscript was inadvertently deleted from the electronic filing document. Paragraph 0011 has been amended herein to correct this, now providing "from femtoampere to picoampere (10^{-15} to 10^{-12} amps)". As this is consistent with the definition of picoampere, this amendment does not add new subject matter and is believed allowable.

Claims 1 through 40 are pending before the examiner. In his letter of November 3, 2004, claims 19 and 20 were allowed, and claims 3-20 and 23-38 objected to as "being dependent upon a rejected based claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." Claims 1, 2, 21, 22, 39 and 40 were rejected.

Claim rejections – 35 USC Section 112

Claim 39 has been amended presently to claim a gate structure having a source implant range *and* a drain implant region, commensurate with the examiner's comments and as supported by the specification. Claim 39 and DOS claim 40 are now believed to be definite and allowable under 35 USC §112, second paragraph.

Claim rejections – 35 USC Section 102

Claims 1, 2, 21 and 22 have been rejected under 35 USC § 102(b) as being anticipated by Manning et al. (US Pat. No. 5,232,865). These claims have been canceled.

Therefore, the examiner's comments are moot, and applicants have no basis for reply at this time.

Claims 1 and 21 have been rejected under 35 USC § 102(b) as being anticipated by Yang et al. (US Pat. No. 6,130,462). These claims have been canceled. Therefore, the examiner's comments are moot, and applicants have no basis for reply at this time.

Claim 39 has been rejected under 35 USC § 102(b) as being anticipated by Klein (US Pat. No. 6,237,083 B1). Claim 39 is the article claim counterpart to method claim 19, which has been determined to be allowable over the prior art of record (including Klein) by the examiner. Claim 39 has been amended to more clearly claim a semiconductor gate structure having a local resistor element with a resistance value of from about one Ohm to about 100 Ohms formed by the methods described in claim 19 and thereby allowable over the prior of record.

Specifically, claim 39 has been amended to claim the local resistor element within one of a source implant region and a drain implant region. Klein does not teach this structure. His resistive element formed by resistor film 47, refractory metal film 48 and conducted metal 49 extends along the dielectric surface beyond the contact 45, which extension may encompass both his source implant region and drain implant region. Klein also does not teach the resistance range of from one to about 100 Ohms. Thus, amended claim 39 is believed to be allowable over Klein

Claim 40 is dependent upon claim 39 and incorporates all of its limitations. It is, therefore, believed to be allowable for the same reasons.

Allowable Subject Matter

Applicants are thankful for and acknowledge the allowability of claims 19 and 20 as determined by the examiner in his letter of November 3, 2004. Claim 19 has been amended herein to correct informalities of language. This amendment is not believed to constitute new matter or otherwise require additional searching or consideration by the examiner, and claim 19 is believed to be allowable as amended.

The examiner has also determined that "claims 3-20 and 23-38 are objected to as being dependent upon a rejected based claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims."

As the examiner has already acknowledged that claims 19 and 20 are allowed, it is believed that the "objected to" claims are, in fact, claims 3-18 and 23-38. Claims 3-18 are directly or indirectly dependent upon claim 1, which stands rejected. The limitations of claim 1 have been incorporated into amended independent claims 3, 4, 7 and 12. Claims 5 and 6 are dependent upon amended claim 4; claims 8-11 are directly or indirectly dependent upon amended claim 7; and claims 13, 14, 17 and 18 are directly or indirectly dependent upon amended claim 12. (Claims 15 and 16 have been canceled.) Therefore, as claims 3-14, 17 and 18 have been effectively rewritten to incorporate all the limitations of the base claim and any intervening claim, they are now believed to be in condition for allowance.

Claims 23-38 are directly or indirectly dependent upon claim 21, which stands rejected. The limitations of claim 21 have been incorporated into amended independent claims 23, 24, 27 and 32. Claims 25 and 26 are dependent upon amended claim 24;

claims 28-31 are directly or indirectly dependent upon amended claim 27; and claims 33, 34, 37 and 38 are directly or indirectly dependent upon amended claim 32. (Claims 35 and 36 have been canceled.) Therefore, as claims 23-34, 37 and 38 have been effectively rewritten to incorporate all the limitations of the base claim and any intervening claim, they are now believed to be in condition for allowance.

New claims 41-64 are dependent directly or indirectly upon claims deemed objectionable and now believed to be allowable as amended. As they merely add additional limitations to already allowable subject matter, and are supported by the specification as originally filed, no new matter is believed to be introduced by these claims, nor is a new search required to examine the claims, and they are also believed to be allowable.

Specifically, claims 41, 45, 46, 47, 51, 53, 57, 58, 59 and 63 all incorporate limitations of claims 2 or 22 (now canceled) regarding the composition of the resistor film. Claims 42, 48, 52, 54, 60 and 64 all add structural limitations to the resistor film (35 angstroms thick, resistance value of no more than 50 Ohms) supported by paragraph 83 of the specification. Claims 43, 49, 55 and 61 all add structural limitations to the resistor film (50 angstroms thick, resistance value of between about 100 Ohms to about 500 Ohms) supported by paragraph 83 of the specification. And claims 44, 50, 56 and 62 all add structural limitations to the resistor film (200 angstroms thick) supported by paragraphs 80 and 81 of the specification.

Conclusion

Pursuant to this amendment, claims 3-14, 17-20, 23-34, and 37-64 as amended or submitted are now presented and are believed to be in condition for allowance pursuant to


the comments of the examiner in his letter of November 3, 2004, and in the comments made during an interview conducted on January 25, 2005.

Respectfully submitted,

Date:

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